

TrueNet®

CopperTen® Four Pair F/UTP Riser Cable



ADC F/UTP CopperTen® cable can be used in data center, communications closet and work station for 10G shielded performance. Installed in high-performance networks world wide, the system's design minimizes alien crosstalk and insertion loss and meets the performance requirements of IEEE 802.3an, ISO 11801 Class EA and TIA/EIA-568-B.2-10 standards

Features:

- Supports 10 Gigabit Ethernet over shielded copper to a full 100 meters
- 20 year TrueNet CopperTen warranty

SPEC SHEET



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Specifications

CONSTRUCTION

Conductor:	23 AWG solid bare copper
Insulation:	HDPE
Separator:	HDPE
Shield:	Aluminum/polyester foil
Drain Wire:	Stranded tinned copper
Jacket:	Lead free, flame retardant PVC
Nominal O.D.:	.280" (7.1mm)

COMPLIANCES

- UL Subject 444
- (UL)-C(UL) Type CMR
- ICEA S-90-661
- NEC 800 Type CMR
- TIA/EIA-568-B.2-1 Category 6 Horizontal Cable Requirements
- TIA/EIA-568-B.2-10 Augmented Category 6 Horizontal Cable Requirements
- ISO/IEC 11801 Category 6 Horizontal Cable Requirements
- ISO/IEC 11801 Category 6a Horizontal Cable Requirements

COMMON APPLICATIONS

4/16 Mb/s Token Ring (IEEE 802.5)	52/155 Mb/s ATM (ATM Forum)
10BASE-T (IEEE 802.3)	622 Mb/s ATM (ATM Forum)
100 Mb/s TP-PMD	1000BASE-T (Gigabit Ethernet)
Broadband & Baseband Video	1 Gigabit Networking System (WGNA)
100BASE-T ("Fast Ethernet")	1.2 Gb/s ATM (ATM Forum)
100BASE-T4 ("Fast Ethernet")	77 Channel Broadband Video
100BASE-TX ("Fast Ethernet")	10GBASE-T Ethernet (IEEE 802.3an)
100VG-Any LAN (IEEE 802.12)	

THERMAL CHARACTERISTICS

Transport and Storage:	-10°C to 60°C
Installation:	4°C to 50°C
Operation:	-10°C to 60°C

MECHANICAL CHARACTERISTICS

Bend Radius:	
During Installation:	8 X O.D.
Installed:	4 X O.D.
Pull Tension:	25# (110N)

ELECTRICAL CHARACTERISTICS

Conductor DC Resistance @ 20°C (Max):	28.6 Ω/1000 ft (9.38 Ω/100 m)
DC Resistance Unbalance (Max):	5%
Mutual Capacitance @ 20°C (Max):	17 pF/ft (5.6nF/100 m)
Operating Voltage (Max):	300 VDC
Worst Case Cable Skew:	45 ns/100 m
Nominal Velocity of Propagation:	72%

4/08 • 104744AE CopperTen® Four Pair F/UTP Riser Cable



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FREQ MHZ	Fitted Impedance	Insertion Loss		Return Loss		Pair-Pair NEXT		PSNEXT	
	Ohms	dB/100m		dB/100m		dB/100m		dB/100m	
	Spec	Max	Spec	Min	Spec	Min	Spec	Min	Spec
1	100 +/- 15	1.7	2.0	24.3	20.0	85.9	74.3	83.2	72.3
4	100 +/- 15	3.4	3.7	27.1	23.0	75.9	65.3	73.0	63.3
8	100 +/- 15	4.8	5.2	29.4	24.5	68.6	60.8	65.4	58.8
10	100 +/- 15	5.4	5.9	31.0	25.0	61.5	59.3	59.1	57.3
16	100 +/- 15	6.8	7.4	30.4	25.0	63.6	56.2	62.7	54.2
20	100 +/- 15	7.6	8.3	31.6	25.0	65.4	54.8	62.7	52.8
25	100 +/- 15	8.6	9.3	33.1	24.3	62.6	53.3	58.6	51.3
31.25	100 +/- 15	9.7	10.4	34.2	23.6	67.1	51.9	63.5	49.9
62.5	100 +/- 15	13.9	14.9	31.1	21.5	54.0	47.4	52.5	45.4
100	100 +/- 15	17.9	19.0	28.9	20.1	52.7	44.3	50.7	42.3
155	100 +/- 15	22.6	24.0	33.0	18.8	45.3	41.4	44.7	39.4
200	100 +/- 15	26.1	27.5	23.5	18.0	50.7	39.8	48.7	37.8
250	100 +/- 15	29.4	31.0	22.9	17.3	42.3	38.3	41.1	36.3
300	100 +/- 15	32.7	34.2	26.2	16.8	43.1	37.1	40.5	35.1
350	100 +/- 15	35.8	37.2	22.9	16.3	45.2	36.1	42.2	34.1
400	100 +/- 15	38.7	40.0	21.9	15.9	44.7	35.3	41.4	33.3
450	100 +/- 15	41.5	42.7	22.4	15.5	39.2	34.5	37.8	32.5
500	100 +/- 15	44.1	45.3	20.1	15.2	36.7	33.8	35.2	31.8
550	100 +/- 15	46.9	-	21.7	-	39.9	-	38.6	-
600	100 +/- 15	49.5	-	17.0	-	36.6	-	34.4	-

FREQ MHZ	Pair-Pair ACR dB/100m		PSACR dB/100m		Pair-Pair ELFEXT dB/100m		PSNEXT dB/100m		LCL dB/100m
	Max	Spec	Min	Spec	Min	Spec	Min	Spec	Spec
1	84.2	72.3	81.5	70.3	83.8	67.8	83.1	64.8	40.0
4	72.7	61.5	69.8	59.5	75.8	55.8	75.2	52.8	40.0
8	64.1	55.5	60.9	53.5	64.2	49.7	62.5	46.7	40.0
10	56.5	53.4	54.0	51.4	64.0	47.8	60.3	44.8	40.0
16	57.2	48.8	56.3	46.8	63.7	43.7	61.2	40.7	38.0
20	58.1	46.5	55.1	44.5	59.9	41.8	58.4	38.8	37.0
25	54.4	44.0	50.4	42.0	57.5	39.8	56.9	36.8	36.0
31.25	57.5	41.5	53.8	39.5	55.4	37.9	55.6	34.9	35.1
62.5	40.8	32.5	39.3	30.5	52.4	31.9	50.6	28.9	32.0
100	35.7	25.3	33.4	23.3	52.9	27.8	51.1	24.8	30.0
155	23.7	17.5	22.1	15.5	45.4	24.0	43.8	21.0	28.1
200	25.8	12.3	23.8	10.3	46.0	21.8	43.4	18.8	27.0
250	14.2	7.4	12.5	5.4	43.0	19.8	41.0	16.8	26.0
300	11.9	3.0	9.3	1.0	43.0	18.3	39.3	15.3	-
350	11.0	-1.0	8.1	-3.0	39.0	16.9	38.3	13.9	-
400	7.5	-4.7	3.4	-6.7	37.5	15.8	35.7	12.8	-
450	-0.7	-8.2	-2.2	-10.2	38.9	14.7	36.2	11.7	-
500	-5.7	-11.4	-7.2	-13.4	39.5	13.8	35.4	10.8	-
550	-5.6	-	-6.9	-	31.9	-	32.3	-	-
600	-12.9	-	-14.4	-	31.2	-	29.2	-	-

NOTE: The above listed discrete frequency electrical performance values are provided for engineering information only. Actual compliance testing is based on swept frequency measurements. The spec values are based on TIA/EIA-568-B.2-10 specification.

Ordering Information

Description	Catalog Number
1000 foot reel, 41lbs 61kg	10G-A6TRF-XX02

NOTES: XX = Jacket color - BL = Blue, WT = White, GY = Gray



Website: www.adc.com

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